

Abstract

5 The invention relates to a radiation shielding arrangement
for shielding high-energy neutron radiation and gamma
radiation from high-energy particle accelerators or storage
rings.

10 The radiation shielding arrangement according to the
invention contains a shielding element made of water-
containing material, for example with chemically bound
water or water of crystallization, in particular gypsum.
The water component of the material preferably makes up at
least 5, 10 or 20 per cent by weight. The hydrogen nuclei
15 or protons contained therein moderate neutrons in a
virtually ideal manner because of the almost identical mass
and the maximum pulse transformation associated with this.